

OTTAWA HOME COMPUTING

The NEWSLETTER of the
OTTAWA HOME COMPUTING CLUB

September, 1987

Vol. 4, No. 3

\$2.00

Bargains Galore!

See page 7 for details

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OTTAWA HOME COMPUTING CLUB

Membership in the Ottawa Home Computing Club is open to all who have a genuine interest in home computing. The membership fee is \$20 per year and entitles members to:

- receive an introductory disk listing available public domain software
- attend monthly meetings
- buy club disks
- receive the club newsletter
- participate in the election of the club executive
- participate in any other club-sponsored activities.

Meetings

Club meetings are held monthly at Charlebois High School (Alta Vista at Heron), usually the third Monday of the month. Meetings for the next school year are as follows:

September 21, 1987	March 28*
October 19	April 18
November 16	May 17*
December 14*	June 14*
January 18, 1988	July 19*
February 15	August 15

An * beside a date indicates that that meeting is not on the third Monday of the month. Due to conflicts with holidays and school programmes, we have had to take the second Monday in December, the fourth Monday in March, and second and third Tuesdays in May, June and July.

Meeting format is standard (see "Club Notes" for specific details on the Upcoming meeting) and that format is:

7:30	Membership registration, Disk of the Month sales, socialization
8:00	Business Meeting
8:20	Main Presentation
9:00	Special Interest Group meetings, Librarian and Machine-specific group meetings

Special Interest Groups are meeting places for people with similar interests. Tell people what you're doing, or would like to be doing; ask people what they're doing, or discuss a problem you're having. What members get out of these meetings is proportional to what they put in.

For details on Special Interest Groups, see "Club Notes" on page 4. Some arrangements may not be finalized at time of printing, and will be announced at the General Meeting.

Also in this time period the following Librarians will be available for your questions, suggestions, disk orders, etc. You may even catch a demo of the latest software:

Apple & Macintosh	Room 227
Commodore and Disk of the Month	Room 219
Amiga	Room 208
C128 and CP/M	Room 210
MS-DOS	Room ?

CLUB EXECUTIVE

Elected Positions:

President	Pierre Casticum	521-6840
Vice President	Scotty Adams	592-3492
Secretary	Serge Comet	729-2142
Treasurer	Mike Bryan	723-0404
Program Coordinator	Wayne D. Schaler	728-7811

Librarians:

Amiga	Don White	829-2062
Apple	Vojta Frysek	722-9778
Commodore 64	Carl Bigras	776-1402
Commodore 128	Peter Nickless	837-3402
and CP/M	Ed Steenhorst	820-5355
TPUG	Marv Bero	225-8551

Other Positions:

Membership	vacant	
Bulletin Board Sysop	Don White	829-2082
Retail Disk Distribution	Peter Martin	731-7700
Newsletter Editor	Bob Mason	837-3197

OHCC Bulletin Board 828-6440

Address all club correspondence to:

Ottawa Home Computing Club
P.O. Box 4164, Station "C",
Ottawa, Ontario K1Y 4P3

OTTAWA HOME COMPUTING

Ottawa Home Computing is the newsletter of the Ottawa Home Computing Club, and is mailed free-of-charge to all members in good standing. *Ottawa Home Computing* is published 10 times a year, monthly except for the months of June and August.

Submissions to *Ottawa Home Computing* are most welcomed. If hand written, please make sure your submission is legible. Articles submitted in a ready-to-print format, or on disk, are also appreciated. Please contact the editor for more information if you choose either of these latter two methods.

Graphic submissions are also needed. For best reproduction, submissions should be designed to the width of one or two columns (approximately 3 1/2" or 7"). If produced on a printer, please use a fairly new ribbon; if drawn, please use a black pen.

Classified advertisements of personal items (up to 25 words) are free to members.

Commercial display and classified advertising possibilities are described in a brochure made available to potential advertisers. Please contact the editor if you would like to receive this brochure.

All correspondence should be addressed to:

Bob Mason
29 Valewood Cres.
Ottawa, Ont. K1B 4G1

TV SHOW: "The Whole Bit"

The Ottawa Home Computing Club, in co-operation with the other computer clubs in the area and with Skyline Cablevision, produces an informative one-hour TV programme. This programme is aired live on the third Tuesday of every month at 10 p.m. on cable channel 22 (for both Ottawa and Skyline subscribers) and repeated during the week. Contact your cable company for more details.

CLUB NOTES

See page 3 for general meeting structure.

UPCOMING MEETINGS

September 21

The best-attended meeting of the past year was the Rummage Swap held in November. Magazines, books, software (no copied programs allowed, only the original manufacturer's disk), hardware (printers, modems and expanders were big items), even whole computer systems were brought to the last meeting, and a lot of people went away happy. Chances are you'll be able to find someone who wants something you've either lost interest in, or updated. And chances are good that you'll find some piece you sort of wanted to buy but the original price was prohibitive. There are a lot of bargains hidden away in people's storage closets. Check it out!

Computer-specific groups will meet from 9-10 in the rooms listed on page 3. The only other special interest group that I know still continues to meet is the **Beginning Computerists**, which meets in room 224. They will be seeing a demo of THE WRITE STUFF -- see details in the minutes of the August meeting.

If you'd like to start up a special interest group on any topic, talk to the Programme Coordinator, Wayne Schaler, or his assistants, Art Ketting and Hal Coxon, and they'll arrange for a room, and have it announced at the meeting, and publicized here.

Topics for future meetings have not been chosen -- watch the Newsletter and the computer classified ad in the Citizen for news. If you have any ideas for meetings, contact one of the programming people mentioned above. ■

NOTES FROM JULY AND AUGUST GENERAL MEETINGS

The General Meeting of July 20, 1987 opened with the announcements of special events by Lynx and Computerland -- but they've already happened. Hope you didn't miss out.

Don White gave instructions (once again) for getting on to the bulletin board. The protocol is 8 bits, 1 stop bit, no parity, either 300 or 1200 baud. New users type 'A' at the main menu to apply to be a registered user. You will have to give your real names, your address, telephone number, type of system, membership number and proposed password. Normally your application will take about three days to process, after which you will be recognized by the system and allowed 50 minutes per day on the board (users not registered are allowed 10 minutes).

Don also introduced the main speaker, or should I say performer, of the evening. Gary Hewett runs Gary's Electronic Service (Midi System Specialist). He had quite an elaborate collection of various types of synthesizers hooked up via midi to two different computers (Amiga and IBM, I think). He explained how many of the variables of the music can be controlled in the midi by software from the computer, illustrating most as he went. His discourse ended with a fairly impressive performance of 'Runaway', with the synths in the back tooting and banging and humming along. Wow!

August General Meeting

Pierre opened the meeting with the announcement that Mike Coltas had resigned as Membership Chairperson, due to job conflicts. Therefore a new person would be needed to handle membership.

Pierre also announced that the club, which often receives notification of special group order deals, will be making such a purchase. The programme is THE WRITE STUFF, a word processor for the C-64. The special feature about this word processor

is that files can be merged with the S.A.M. (Software Automatic Mouth) Programme (not included) to produce a talking word processor, a useful tool for the sight-impaired, for children, or just for impressing people. The bulk deal is: disk, support from author, registration card, 50-page reference manual and plastic keyboard overlay (C-64 only). The price is between \$10-15 CAN. -- it retails for \$49.95. See it being demoed in the Beginners Group from 9-10 in room 224 September 21. Or talk to Pierre Castricum or Mary Bero -- they can also help you get S.A.M., if you don't have it already.

Scotty had just come back from MacExpo, and waxed eloquently about the new software coming out for the Mac (see details elsewhere in this issue).

Ken Fairclough was on hand to tell the club about a new deal for Amiga buyers. Commodore has introduced package deals for educators, and for user group members, ap-

parently because of the support both groups have given Commodore in the past. For new Amiga buyers, the package should alleviate some fears, as it provides a well-rounded collection of software to go with the new computer. See your Amiga dealer for more details.

The main presentation of the evening was by Pierre Lamoureux and Ian McCall (hope I got the names right) representing Epson Canada. A slide presentation detailed Epson's dominance in the Canadian printer market, their connection with Seiko, their Equity Computer, Standard Codes for printers, and some new features they're developing, like scanning heads which attach to some of their more expensive printers, turning them into Optical Character Readers.

As well, Epson has a new printer out on the market, the LX800, which has a draft speed of 180 cps and several character sets.

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PRESIDENT'S CORNER

by Pierre Castricum

Greetings and welcome to the September meeting of the Ottawa Home Computing Club.

Salut et bienvenue à la réunion mensuel du club d'ordinateur Ottawa Home Computing Club.

How time goes by!

It seems like just yesterday that the warm weather arrived, and now it's slowly being replaced by cooler temperatures. Sitting in front of one's computer has become less tiresome unless, of course, you own an air-conditioner.

It's time again for our yearly garage/rummage sale. If you have any hardware or software that you would like to get rid of, bring it to the meeting and perhaps you will find someone who is looking specifically for your stuff. Just remember, ONLY ORIGINAL SOFTWARE will be allowed for sale -- no copies please. A member of the execu-

tive will be stamping articles for sale at the door.

Ken Fairclough, Commodore's regional representative, announced at the last meeting a limited-time offer being made by Commodore to club members who are planning to purchase one of the Amiga line of computers.

If you purchase either a 500, 1000 or 2000, and can prove you're a member of a recognized Commodore user group, you will be able to purchase one of two special software packages. Package A consists of 5 pieces of software together with a joystick for \$199 CAN. (suggested retail value \$750 CAN.). Package B consists of 7 pieces of software for the price of \$399 (s.r.v. \$1400). Purchases must be made between August 21 and October 31, 1987. For additional information, please contact Ken at 828-4551.

I hope to see you all at the meeting.

P.S. I will be trying once again to sell the ZAPPY ZOOKS. (Will someone please buy the programme and put this man out of his misery.--Ed.) ■

EDITORIAL

by Bob Mason

You'll notice several new ads gracing the pages of this issue. Tim Smith has volunteered to see if he can get some advertising. The ads from Ali and Entrenet are the fruits of his labour. And Vojta Fryzek made the contact with Full House. We're happy to have these new advertisers, along with Maccom, in this publication. And thanks to Tim and Vojta.

A lot of things go in cycles, and my pleas for help seem to occur at 4-6 month intervals. It coincides with the cycle of contributions to the newsletter. People get enthusiastic about writing articles for a few months, and the contents of the newsletter improve. Then interest drops off, and the contents return to the regular contributors plus things I can patch together plus this type of stuff -- pleas for help.

The newsletter is at a low cycle right now, and facing 8 issues in the next 8 months. If contributions stay at a low level, we'll probably end up with 8 and 12 pages issues; I'd much prefer 20-24 page issues, but I'm not going to fill up pages with my own articles just to have a bulky publication. Besides, I don't have the time.

If you have an idea for a column, but don't feel qualified to write it, give me a call. I may be able to suggest people who could help you out.

I'm not very good at button-holing people and getting them to write stuff, so I appreciate the contributions of Pierre, John, Vojta and Peter, who, every month without fail, have supplied me with material. Their material guarantees at least an eight-page newsletter every month. I count on the rest of the membership to make each issue a substantial, and interesting publication. ■

Ottawa Home Computing Club

presents

Bummage/Swap Night

Monday, September 21, 1987

7:30 - 9:00 p.m.

Charlebois High School

Turn some of those old computer products that you haven't used for years into something more useful. Perhaps you've upgraded and have some equipment or programmes that are no longer useful to you. Well, there's probably someone looking for just what you have.

If you've got something (connected with computing) that you're not going to use and would like to get rid of, bring it down to the meeting. If you're selling, come early -- last time there was quite a crowd. All the tables in the main hall will be available. And if you only have a few items, bring them down and hook up with someone else -- that way one can mind the store while the other browses.

Cables, fast load cartridges, disks, disk boxes, cassette recorders, original software (no copies please!), old computers, monitors, disk drives, modems, magazines and books, expander boards and computer furniture are only a few of the things that sold at the last such night.

We estimate that over 300 people came to our last swap night, and hope to have as many again. Be part of it -- you might pick up some cash for that unwanted equipment, or pickup a bargain.

Remember, the club does not condone the selling of copied software, and selling of same will not be allowed. All items must be inspected and labelled before they can be sold.

Come one -- Come all
Bring your goodies
and be prepared to haggle!

Music Maker 64

by Bob Handforth

In the last of the four reviews which I wrote on programming three-voice music on the C-64, (*Ottawa Home Computing*, February 1987), I concluded by stating that the best solution probably lies in the use of machine language. Since then I have had an opportunity to study and experiment with a program which appeared in the January 1987 issue of *Compute!* magazine. The article was titled "Music Maker 64", and while the program was written in BASIC, it contained a machine language routine which was really the heart of the system. The section written in BASIC permitted users to enter or change the various sound parameters -- ADSR, waveform, filters, etc. -- without interfering with the arrangement and operation of the ML routine.

My knowledge of machine code is quite limited, but I learned a great deal by examining and analyzing the various ML values. I tested the program on a short tune, and then on a longer one, and saw that it had many advantages -- as well as some disadvantages. Consequently, this review will be in the nature of a comparison (or contrast) between MUSIC MAKER 64 and the Vogel-Scrimshaw method which had been my preferred system. This was described in the third of my four reviews (*Ottawa Home Computing*, January 1987).

My first impression on using MUSIC MAKER 64 was that the sounds were more distinct and clear-cut. The article described the processes of "tonguing" and "slurring" and the program includes a statement which can control these features to some degree. In using the Vogel-Scrimshaw method, this was sometimes a problem regardless of how the

envelope was defined. For all practical purposes MUSIC MAKER 64 possesses almost unlimited memory for storing data. The way the program is arranged permits as many as 3000 notes to be entered for each voice.



The set-up time required was also shorter than the other system for any given tune of the same length.

In MUSIC MAKER 64 the music data is entered by using what is probably the simplest possible system -- the note number prefixed to an octave number. For example, 84 was indicate the eighth note (G) in the fourth octave; 115 would indicate an A-sharp or B-flat in the fifth octave, etc. This method is not only simple, but is much faster and easier to remember than any others I have encountered. In MUSIC MAKER 64 the high and low frequency numbers for all 96 notes (12 in each of 8 octaves) are poked into memory and thus can be immediately identified with whichever note is indicated in a tune. In the Vogel-Scrimshaw program only those frequency numbers required by the music were stored in memory.

The Vogel-Scrimshaw program contained a subroutine which stored the increasing total of the number of 32nd note values which accumulated as the music played. It was thus possible to achieve a moderate form of animation by tying the movements of a sprite to this changing total. I feel certain that something like this could be done using MUSIC MAKER 64, by modifying some subroutine within the ML portion of the program. However, up to now I've had no success; someone more familiar with machine



code probably could accomplish the task with little difficulty.

During the playing of a tune, especially one with a slower tempo, a pleasant and varied effect can sometimes be obtained by changing the waveform of the voice carrying the melody. When using the Vogel-Scrimshaw system this was easily done by a statement such as:

```
IF I>144 AND I<288 THEN V(0)=65
```

but I could not get this to happen when using MUSIC MAKER 64. However, a somewhat similar result could be achieved by assigning different waveforms to each of two voices and then programming the music data for the melody to the other voice part way through the tune.

There is one other effect which I was able to achieve using the Vogel-Scrimshaw program but which I could not get MUSIC MAKER 64 to perform. The process of "detuning" requires that two voices be assigned simultaneously with the exact same musical data, except that one voice's frequency is slightly off -- by about three or four hertz. The result is that one hears three or four "beats" per second, giving a tremolo-vibrato effect, somewhat like the sound from a violin when the violinist moves his left wrist rapidly back and forth. The music becomes a little sweeter and less harsh when this is done, but again -- the solution probably lies in changing part of the ML routine, and I'm not quite up to that just yet.

C-64 DISK OF THE MONTH RETAIL SALES

The C-64 Disk of the Month is carried at the stores listed below. It sells for about \$4.50 and is available two days after each meeting.

All Computers	1158 Ogilvie Rd.	744-0220
Book Heaven	2297 St. Joseph (Orleans)	630-3365
Compucentre	Carlingwood Mall	729-0448
G-Plus	130 Albert St. 301 Moodie Dr. 1400 Clyde	230-7750 820-7326 723-2201
Mr. Diskette	119 O'Connor 1600 McIvane Rd.	232-5203 727-0179
Zap & Zoom	435 Kent St.	232-4400

One conclusion that I reached from these tests and observations is that there seems to be no way of avoiding a delay for set-up time. This is true for all methods, although the waiting period in MUSIC MAKER 64 is noticeable shorter than for other systems. In all cases, the length of the tune is not so much the governing factor as is the number of notes to be processed. Jim Butterfield's Driver Program, which produces music instantly with no delay, is an exception, but it does not have true voice independence.

Recently Craig Chamberlain, one of *Compute!*'s expert authorities on Commodore music, produced a series of musical numbers which are arranged and played by means of an ingenious program titled "The Enhanced SIDPlayer". Many of the musical sounds and effects heard in this series are really amazing. Needless to say, the programs are written almost entirely in machine language, for both the C-64 and the C-128. There seems to be no limit to the incredible capabilities of the famous SID chip.

If any reader is interested in examining some examples of the methods I have discussed, the OHCC Disks-of-the-Month contain a few. The tunes "Forbidden Games" on disk #48 and "The Glow Worm" on disk #52 were arranged using the Vogel-Scrimshaw method. "Beer Barrel Polk" on disk #52 and "Bumble Bee" on disk #55 were written using MUSIC MAKER 64. ■

Ottawa Home Computing Club
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Games Reviews -- Notable

by Timothy M. Smith

I haven't got much time. They only let me out of my rubber room for a few hours. In light of this, and the fact that summer is slowly fading into fall, I thought it would be appropriate to provide short previews of some of the most noteworthy software to hit Ottawa shelves over the past few months. For those whose computers are being fired up after serving duty as dust traps, doorstops, or paperweights, the list below presents a number of titles that are worth checking out.

Top Fuel Eliminator (Gamestar/Activision)

If names like 'Big Daddy' Don Garlitz or Mary Muldowney, are at all familiar to you, then the subject of this program will be immediately apparent. It is six seconds of madness as you try to control a 2500 pound monster rocketing down a quarter mile of straight track. This action simulation of drag racing emulates its real life counterpart in that setting up the vehicle in the pit is as vital to winning as the driving. An icon menu controlled by the joystick allows you to adjust such elements as tire pressure, wing angle, and fuel mixture to take advantage of track conditions.



While the graphics can only be classed as good, Top Fuel has an intangible quality that makes you want to come back and try again and again to better your time. It requires precise timing and if your reflexes need 'tuning' this program could prove to be a rough ride.

World Class Leaderboard-- Famous Courses Vol 2. (Access)

Yes Leaderboard fans the Carver brothers have come up with yet another set of holes,

including Pebble Beach, to test your skill. Like Vol. 1, the punch shot is included to help you get out of trouble when you hit a banana ball off the tee right into the nearest woods. Try Glenmoor, course D, for



a real challenge. Volume 3 is available in the US and should arrive here by mid fall.

Breakthru (DataEast)

Suicide drive and shoot action ported from the arcade where it has been popular for some time. Navigate an armoured truck through five levels of enemy terrain. Each level provides a different set of obstacles to impede progress and redesign your vehicle into late model inoperable subcompact. If you make it to screen five, you can rescue the PK430 spy plane. Arcade addicts should enjoy the fast action, explosive graphics, raucous music, and high difficulty.

Pirates! (Microprose)

Travel back in time to the late seventeenth century. Against the canvas of the vast Caribbean, relive grand adventures of men like Sir Francis Drake, or the more notorious Henry Morgan who later became Governor of Jamaica. Navigate by guesswork, compass, and sunlight, leading your crew as you plunder Spanish galleons and sack Spanish towns. Your leadership, sailing skill and prowess with the blade, will



le Releases this Summer

determine the difference between a profitable venture or a permanent residence in 'Davy Jones' locker. This is another superb action simulation from Sid Meier and company. The disk is accompanied by an excellent manual which makes for great reading by itself.

Street Sports Baseball (Epyx)

Venture into the world of 'urban athletics' with this first program in the STREET SPORTS series for Commodore. This is baseball the way many of us knew it growing up. No well groomed diamond, no smartly uniformed players running onto the field cheered by thousands of beer belching fans enjoying an afternoon off work at the ballpark. Neighbourhood kids are the stars. They populate the vacant sandlots or open fields where garbage can lids, bits of wood, a jacket, an old shoe comprise the diamond. A lighthearted look at the game of summer.

Defender of the Crown (Mindscape)

This program, which first saw life on the Amiga, is the introduction to the 'Cinemaware' series for Commodore computers. It is a graphic adventure which attempts to capture the heroism of Hollywood in movie form. Its structure utilizes many standard cinematic conventions.

As an English nobleman in the time of Robin Hood, you build armies, attend jousts, save damsels, and raid castles with the objective being to rid England of the Normans. The most notable feature of this work is the graphics. Screens come alive with colour, clarity, and detail. Defender of the Crown contains some of the finest artwork produced to date for the C64. This is a strategy program, but the elements have been simplified in order to allow the action to unfold like a film. While you don't have to be a double domed heavy thinker to figure out your next move, winning is no simple matter.



NCC1701

Earth Orbit Stations (Electronic Arts)

The Federation of Earth Orbit Stations welcomes you. Your lifelong ambition of exploring and developing the galaxy is about to be fulfilled. As Space Director, you construct space stations, conduct research, and market technologies competing against the computer or, three other human opponents.

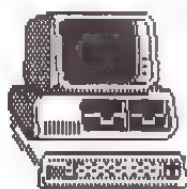
The object is to expand the knowledge of the human race. This is an interesting program which demands that you have a basic understanding of market supply and demand. Knowing when to buy, when to sell, as well as what percentage of your station you are going to devote to commerce, or, technology is vital to success. Constructing orbiting stations is done on a grid. The process is a variant on the old jigsaw puzzle theme.

Once modules are positioned on the grid they cannot be taken away. Consequently, some careful forethought is needed before placing a piece. For those more cerebral, this program should be a delight.

B24: Liberator (SSI)

A challenging simulation of the B24 heavy bomber campaign over the oil refinery at Ploesti, Rumania during World War II. It is simplified so those who are not pilots can fly. However, the flight characteristics of the real plane have been carefully built into the program algorithm. Changes in weight loading, as well as control surfaces, i.e. flaps, rudder, landing gear

continued on page 15

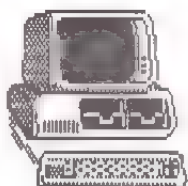


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Bob Mason
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COMMODORE 128

HINTS, TIPS AND TRICKS
COMPILED BY P. NICKLESS

Songs in the key of C- The C128's SID chip has great music capabilities and the ease of programming provided by Basic 7.0. There is one slight drawback, though. If you program a song using the default note values in SID, your song will be in the key of F instead of the key of C. That means you cannot accompany your C128 on the keyboard or piano without first transposing the music. The accompanying program will play the default scale, then a C scale using the Sound command to demonstrate the difference between the two scales.

```
10 TEMPO 8
20 PLAY"V104T7U15XOCDEFGABO5C":SLEEP1
30 READA:SOUND1,A,30:IFA-OTHEENEND:ELSEGOTO30
40 DATA4297,4822,5412,5724,6429,7217,8122,8578,J
```

Quiet, Please- At power-up or after pressing the RESTORE key or reset button on the C128, if you experience a background hum from the monitor speaker, try typing CHR\$(7) or pressing CTRL-G, a short tone will sound, followed by silence.

Kaypro CP/M Disks- There are many public domain CP/M programs available that can be used with the C128 and 1571 drive. When loading a disk formatted for the kaypro II, you may get the prompt KAYPRO IV on the screen. To get the Kaypro II format, press the cursor right key, and the disk will load correctly.

Data on Side 2 of the 1571- The 1571 double-sided drive allows twice as much storage as a single-sided 1541 disk. However, once you have reached 664 or fewer blocks free, data saves to the disk are quite slow. It appears that the drive writes a block, then checks for the next free block, writes another block, and so on. If you have several long programs on the first side, you can reduce these delays by copying the long programs to the back of the disk and then scratching the original version. The data files will now be written, at normal speed, to the empty blocks on the first side of the disk.

C128 no-run Safety- The SHIFT/RUNSTOP key combination will load and run the first program on a disk, which is nice, but can become a disaster if accidentally pressed while writing a program. POOF! there goes the program! To disable SHIFT/RUNSTOP, type in and run the following program line, which erases the command that's built into location 4104:

```
10 POKE 4104,0:FORI=4159 TO 4164:POKEI,PEEK(I+9):NEXT
```

Function Key Restore- If you want to restore the default function keys on the C128, just type in this line:

```
BANK15:SYS49425
```

It will restore the function keys, the tab settings and clear the screen. It also changes 40-/80- column modes, so you'll have to use ESC X to get back to the screen on which you typed the SYS.

C-64 Game Design

C64 Game Design

Thirty first of a series
by John Batchelor

In answer to our Editor's question about what word processing setup I use, this article is being typed (on my lunch hour, to be sure) on a WANG PC using WANG's own WP software. The function keys on a WANG PC have labels such as COPY, FORMAT and INDENT, just like the dedicated WP machines that company also makes. This makes their software very easy to learn although it is no longer "state of the art" since it can't do multiple columns or automatic indexing. It does not do hyphenation either, which makes narrow columns look ugly at times. A partial right justify option is available and I will use it for this month's article so you can see the difference. The printout is on a Hewlett Packard Laserjet which, sad to say, is a bit too expensive for home use.

Despite the two month layoff, I have done nothing with SPACECOMBERS. The excuses are the heat, the pool vacation, construction at our house, overwork, visitors and so on. However I did give an October target when I started. I hope my documentation is sufficient to let me get back at the game when I can.

A good source of interesting recreational computer projects is the "Computer Recreations" column in Scientific American, written by a Professor Dewdney at the University of Western Ontario. (His book "The Planiverse" is a treat, too.) I submitted a program called "CHAOS" based on the July column and have had fun with the Mandelbrot Halo programs discussed in earlier months.

In fact, SPACECOMBERS owes some of its inspiration to that column and its predecessor, J. R. Conway's "Mathematical Recreations" which discussed the simulation of competition and cooperation. "ETHICAL ROBOTS" from many months ago was based on that part of game theory. SPACECOMBERS could be used (if it ever gets working) as a laboratory tool for psychologists trying to calibrate people's greed and cooperation.

On another topic, several months ago I looked at the major magazines supporting the C64 from the viewpoint of an amateur games programmer. Let me update that review.

AWOY! is easily the most useful. It has both BASIC and machine language games, usually several each month. The articles often explain the programming techniques and the programs usually aren't too long to type in an evening. Sometimes the games are not completely bug-free and screen shots are not provided in all cases. I like to see the graphics before I type for hours

The GAZETTE is probably the next best. The games are good but there isn't much explanation. You don't learn much from typing in numbers although you could disassemble the listings.

COMPUTE! usually has only one game each month but you can compare several computers. It always strikes me that the same game can be played on computers which are 500% different in price with the same amount of enjoyment

COMMODORE MICROCOMPUTERS has the occasional gem but is not consistent. RUN seems to have abandoned games except for trivial flash card drills or the equivalent. TRANSACTOR doesn't do games although you can often get useful techniques or even subroutines from the articles. FAMILY COMPUTING and INFO 64 don't provide significant game listings

These ratings might be altered a bit if you consider game reviews as useful to the amateur game programmer. I know I read the reviews and get discouraged that the professionals are so far ahead. However, I was re-inspired by BATTER-UP in the August AHoy! This is a poor man's HARDBALL. The graphics are quite good and the game could be "tuned-up" to become a very enjoyable contest. It would be easy to add a pitch selection mechanism for a second player. Some other adjustments are needed, for example, if you swing at every pitch a big score seems guaranteed.

Let's see some of you take a crack at a C64 game. The club provides an opportunity to share/show off your effort.

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position, etc. will affect aircraft reaction and performance. B24 takes practise to learn.

As the lead plane of the 460th bomb group, you play the role of pilot, copilot, engineer, navigator and bombardier. Path to the target and bomb drop point are your decision. Consequently, navigating and pilot skills will determine success or failure on any one of the 19 historically recreated missions. Graphics are simple but well defined with clouds providing a nice 3D effect as your bomber viewed from above flies beneath them. SSI war game fans will definitely want to take a look at this one.

Video Title Shop (Datasoft)

This is a utility but I have included it in this article because it is a well done program from a company I usually associate with the word mediocrity. For those who own a VCR, Video Title Shop (VTS) will permit the user to produce some very professional title effects, charts, or diagrams. Whether your video is of Uncle Harry with Rover in the back yard, or you want to give a presentation or set up a television with an advertising banner for a store, VTS will do inexpensively, and with relative ease, what would cost a lot of money in a professional TV studio. Also packaged on the same disk is Micropainter Plus, to allow addition of artwork behind the title effects. A clear comprehensive manual makes use of VTS relatively easy even for a novice.

A special thank you to the people at Ali Computers without whom this article would not have been possible. Thanks guys. And don't forget: when the going gets tough -- upgrade! ■

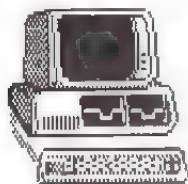


Computing News -- What's Coming

by Bob Mason

This has been a summer of developments in the computer industry, developments which make clearer each company's future direction.

IBM started off with the introduction of its Personal System-2, a series of computers it hopes will be unccloneable. The new operating system, OS-2, is not yet available, but will offer compatibility with PC-DOS and feature multitasking in a window environment. The hardware offers increases in memory size, speed and



graphics capabilities, but, until the new operating system is fully implemented (sometime in the new year), it seems unlikely that there will be a stampede to get these new machines. Some new buyers will be interested, for sure, but the \$2,500-17,000 price tag for a bare bones system (computer and keyboard) will keep the burgeoning PC-XT-AT clone industry alive and kicking.

Atari has not brought out any new machines, choosing to consolidate its ST series with peripherals, instead. The ST series has achieved critical acclaim, but not the sales to match. It was felt that the main weakness was in dealer support, with Atari's being sold at discounters like K-Mart and through a few computer specialty stores where it had to compete for shelf space and sales support with IBM, Apple and, recently, Amiga. The solution, just

announced a few weeks ago, was to purchase the 'Federated' chain of 67 consumer electronics stores which would retail the product.

Atari apparently felt that its ST series needed more support than was forthcoming from the discounters (most sales staff at those stores know little more than how to load the odd programme). And yet Atari was not able to get into the specialty stores such as Computerland, apparently partly because those stores are still angered at the treatment they got from Tramiel when he was with Commodore, continually cutting prices (and their profits) and using the mass discounters to distribute his line.

While that may be true, I think it also shows how the market has changed from the days when Jack Tramiel ruled Commodore and Commodore made its name in those take-the-box-off-the-shelf-and-pay-the-cashier type of stores. Some of the differences between then and now are:

- ♦ there is now a large base of installed home computers, of which Atari has only a small share;
- ♦ that small market has meant that software and hardware development is slower, and magazines are fewer;
- ♦ Atari has never had the User Group and hacker support in North America that Commodore and Apple have had.



Atari's purchase has been called a 'Master Stroke', giving them a dedicated staff of sales reps eager to pass on product updates and solve user problems. And

now Tramiel is looking for a semi-conductor factory to buy, much as he bought MOS Technology when he was with Commodore.



Apple has announced several new products to support the Macintosh. The two most interesting are HyperCard and Multifinder, two powerful programmes each priced at \$78 CAN, and which will be bundled with new Macs.

HyperCard is a database programme that allows the use and creation of files combining information in the form of text, graphics, video, voice, music and animation. Included is HyperTalk, which allows users to write "their own software programs using simple English language-based commands." This package will allow access to new technologies for information storage and retrieval. One industry analyst raved "Apple has just pushed CD-ROM development ahead by several years. This is a breakthrough product that will create an entire new class of software."

Multifinder is a multi-window operating system which permits the running of as many as 30 applications at the same time (multitasking), including work in different operating systems (e.g. MS-DOS and Apple). Amiga users are already enthusiastic about the joys of multitasking (see *Info* #16); Macintosh will beat out big blue by several months on this one.

Also included in Multifinder is Apple File Exchange, a utility which allows transfer and translation of data files and documents created in MS-DOS and Apple II Pro-DOS.

Other products announced for the near future include AppleFax Modem (\$1,118 CAN.) -- communicates with facsimile machines(?); Apple Share PC (\$480 CAN.) -- communicates with PC's; and ImageWriter LQ (\$2,072 CAN.) -- letter quality wide carriage dot matrix printer.

All of this has led to speculation that Apple is abandoning, or at least down-playing its Apple II series of computers; this was partially confirmed by Apple's cancellation of the new IIc, announced for December.

Commodore's Amiga has been the darling of the summer computer shows, and the low-priced Amiga 500 has been getting impressive reviews. Apparently Commodore can't keep up with the orders, and rumour has it that the former C-128 production line is being used to produce the 500. Software developers are moving in fast on the new market. If the Amiga does take off, will Commodore drop the C-64 and/or C-128?



'We'll make them as long as they sell' says new Marketing VP Rich McIntyre. Sounds like the back-burner treatment.

So our club may resemble an orphanage in a few months. Fortunately, the large number of Apples and Commodores (and PCs and XLs and ...) out there will guarantee continued third-party support, and may be a blessing if prices drop, enabling the inexpensive purchase of backup equipment. ■



Commodore/VCR Connections

At the May meeting, Art Ketting and Hal Coxon gave a presentation on connecting Commodore computers to a VCR, so that you could record screen and audio output on your VCR. These are the specific details for making that connection:

Make up a cable to go from pin 2-3 of the computer to 'audio in' on the VCR. And from pin 2-4 of the computer to 'video in' on the VCR.

These connections are the same for the C-64 and C-128. The VIC port illustrates the pin numbers. There are more pins on the C-64 and C-128, but the actual numbered pins are correct. Simply use a patch cord for audio/video out from the VCR to the monitor in order to play the tape back on your monitor.

VIC 20 Audio/Video Port



Pin#	Name	Description	Colour
1	+5V	10 ma. maximum	Red
2	GND	System Ground	-
3	AUD	Audio Out	Grey
4	VID L	Video Low	Black
5	VID H	Video High	White

Colour refers to Radio Shack Part # 42-2394

Commodore 64 Audio/Video Port

Pin#	Name	Description
1	LUM	Luminance
2	GND	System Ground
3	AUD	Audio Out
4	COMP	Composite Video
5	JACK	Audio In
6	CHR	Chroma out
7	N/C	No connection
8	N/C	No connection



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